Name: \_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_ Date: \_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_ Period: \_\_\_\_\_\_\_

**Biofest Brochure Redemption Assignment**

Read the Cloning Fact Sheet provided by the National Human Genome Institute at the following web address: <https://www.genome.gov/25020028/cloning-fact-sheet/>

Answer the following questions thoroughly and accurately in complete sentences to earn back points deducted from your Biofest brochure grade due to late penalties. Each question answered correctly will earn 3% back (for a maximum total of 30% back). Answers should be in your own words unless the language used in the fact sheet is too technical for rewording to be an option.

1. How do scientists define cloning? What types of things have scientists cloned?
2. Describe an example of natural cloning.
3. Provide an example of a vector used in gene cloning. Why are vectors used in gene cloning?
4. Summarize the method used to clone an animal like Dolly the sheep.
5. Why is it more difficult to clone humans than it is to clone other mammals?
6. Describe one possible use of animal clones in the field of medicine, agriculture, etc.
7. Describe another possible use of animal clones in the field of medicine, agriculture, etc.
8. Explain why Dolly aged more quickly than normal sheep.
9. Explain why embryonic stem cells may be useful in the field of medicine.
10. How are embryonic stem cells similar to cancer cells?